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REMARKS

This response is intended as a full and complete response to the non-final Office Action mailed September 22, 2004. In the Office Action, the Examiner notes that claims 1-19 are pending, of which claims 1-19 are rejected. By this amendment, Applicants have amended claims 4, 5, and 9, and claims 1-3, 6-8, and 10-19 continue unamended.

In view of both the amendments presented above and the following discussion, Applicants submit that none of the claims now pending in the application are non-enabling or anticipated under the respective provisions of 35 U.S.C. §112 or §102. Thus, Applicants believe that all of these claims are now in allowable form.

It is to be understood that the Applicants, by amending the claims, do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

IN THE SPECIFICATION:

The Applicants have amended the specification to update information pertaining to documents incorporated by reference. Such changes do not add any new subject matter to the application.

CLAIM OBJECTIONS

The Examiner has objected to claim 4 stating: "Claim 4 is objected to because ... on line 28 of page 25, '... to said destination module, ...' should be '... to said destination server module, ...'".

Applicants have amended claim 4 as suggested by the Examiner. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

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REJECTIONS

35 U.S.C. §112

Claims 5 and 9

With respect to claim 5, the Examiner states that there is insufficient antecedent basis for the limitation "repeating steps (a) through (c)" in line 2 of page 26. In response, Applicants have amended claim 5 to recite:

5. The method of claim 3, wherein in the case of an acceptance message, said method further comprises the steps of:
determining whether said transition extent deadline has passed;
and, in the event of said transition extent deadline having passed,
determining a next transitional extent for said content stream being provided to the user.

As such, Applicants respectfully submit that claim 5, as amended, is not indefinite and fully satisfies the requirements under 35 U.S.C. §112 and is patentable thereunder. Therefore, the Applicants respectfully request that the rejection be withdrawn.

With respect to claim 9, the Examiner states that there is insufficient antecedent basis for the limitation "said alternate extent" in line 20 of page 26. In response, Applicants have amended claim 9 to recite:

9. The method of claim 4, wherein an alternate extent is selected to cause a repetition in content preparation.

As such, Applicants respectfully submit that claim 9, as amended, is not indefinite and fully satisfies the requirements under 35 U.S.C. §112 and is patentable thereunder. Therefore, the Applicants respectfully request that the rejection be withdrawn.

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35 U.S.C. §102

Claims 1-19

The Examiner has rejected claims 1-19 under 35 U.S.C. §102(e) as being anticipated by Lumelsky et al. (U.S. Patent 6,377,996, hereinafter "Lumelsky"). Applicants respectfully traverse the rejection.

Independent claims 1, 15 and 17 recite:

1. "A method for migrating a user from a source server module providing a content stream to said user, said content stream divided into a plurality of extents, said method comprising the steps of:
determining, for said content stream being provided to said user, a transitional extent defining an appropriate first extent to be provided to said user via a destination server module;
determining if said destination server module is capable of providing said transitional extent to said user within a first time period; and
causing said destination server module to provide said transitional extent and subsequent extents associated with said content stream to said user." (emphasis added).
15. "A method for receiving a migrated user, comprising:
receiving a transitional extent identifier, an extent deadline and a content identifier;
determining if the identified transitional extent of the identified content may be accessed prior to said extent deadline; and
in the event of a favorable determination, accessing said transitional extent and providing a message indicative of acceptance of said user." (emphasis added).
17. "Apparatus, comprising:
a plurality of server modules, each of said server modules having associated with it a respective mass storage device for storing content as respective sequences of extents;
a switch, for coupling content streams provided by said server modules to a transport processors, each of said transport processor; wherein
at least one content stream being provided to a user by a first server module is caused to be provided to said user by a second server module, an initial portion of said content stream provided by said second server module being defined by a transition;
said first and second server modules cooperating to define a transitional extent representing a first extent of said content stream to be provided by said second server module;
in the case of a migration event, at least one content stream provided by a source server module, said failing server module are

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migrated to a non-failing server module such that subscribers receiving said content streams receive substantially uninterrupted service." (emphasis added).

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984)(citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 U.S.P.Q. 193 (Fed. Cir. 1983)) (emphasis added). The Lumelsky reference fails to disclose each and every element of the claimed invention, as arranged in the claim.

In particular, the Lumelsky reference discloses:

"To migrate a client and its streaming session, AS1 710 signals the selected target server PS2 700 with a hand-off request message 740. The hand-off request message 740 contains the unique identifier of the hand-off request, the unique identifier of the stream, the current segmentation marker on this stream, the unique identifier of the client, the target segmentation marker, etc. These identifiers are found in all messages of the switching protocol."

The segmentation markers as disclosed in the Lumelsky reference are inserted into each of the content streams prior to the streaming and after the encoding of the content. Specifically,

"Segmentation markers, to be identified by the client, are overlayed over a stream at precise locations. The placement of segmentation markers within a stream is content independent. According to one aspect of the present invention, the placement of segmentation markers is based on a globally known constraint, such as every L number of bytes of original data."

"In the preferred embodiment, this is accomplished prior to the decoding of the stream through the steps of:

- a) inserting segmentation markers into a stream prior to the streaming and after the encoding;
- b) exchanging information between switching parties in terms of segmentation markers during a seamless switch; and
- c) identifying, locating, and removing these segmentation markers in any such stream at the client."

(see Lumelsky, column 11, lines 33-40, column 8, lines 4-23, and Figures 4-6).

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By contrast, the Applicants' invention claims "determining, for said content stream provided to said user, a transitional extent defining an appropriate first extent to be provided to said user via a destination server module." Specifically, an extent temporarily following the presently accessed extent is defined as the transitional extent. The transitional extent is the first extent to be streamed to the user by the destination server module during a user migration. Thus, the transition extent is selected such that sufficient time between the present time and the transitional extent deadline is provided to allow such a transition to occur. (see Applicants' specification, page 14, lines 11-17).

Moreover, each server module 220 (within the information server 125) includes a respective buffer. Each buffer memory is capable of holding at least one service (i.e., one extent) worth of information retrieved from a disk array 110 via the respective server module 220. Each buffer 225 is coupled to a switch 230. Each server module 220 is capable of providing information to a plurality of users 106. Thus, each server module buffer 225 associated with a server module 220 is capable of holding at least one extent of data for each of the plurality of subscribers 106 serviced by that server module 220. For example, if the first server module (220₁) is capable of serving 100 subscribers, then the buffer 225₁ associated with the first server module 220₁ must be capable of holding at least 200 seconds worth of information, illustratively video information and any associated audio information. (see Applicants' specification, page 7, lines 27-31 and page 8, lines 11-18, and Figures 2, and 3A and 3B).

Nowhere in the Lumelsky reference is there any teaching, or even suggestion of a transitional extent, as defined by the Applicants' invention. That is, nowhere is there any teaching or even suggestion of "a transitional extent defining an appropriate first extent to be provided to said user via a destination server module." Rather, the Lumelsky reference merely discloses segmentation markers that are inserted into a stream to assist in migrating a client and in streaming session. Accordingly, since the Lumelsky reference fails to teach a transitional extent defining an appropriate first extent to be provided to said user via a destination server module, the Lumelsky reference fails to teach each and every element of the claimed invention, as arranged in the claim.

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As such, Applicants submit that independent claims 1, 15 and 17 are not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Furthermore, claims 2-14, 16, 18 and 19 depend, either directly or indirectly, from independent claims 1, 15 and 17 and recite additional features thereof. As such and at least for the same reasons as discussed above, the Applicants submit that these dependent claims are also not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejections be withdrawn.

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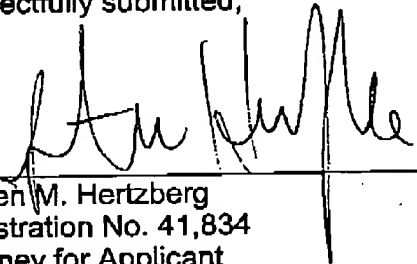
CONCLUSION

Thus, the Applicants submit that all of the claims presently in the application, are enabling, not anticipated and patentable under the respective provisions of 35 U.S.C. §112 and §102. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, Esq. or Steven M. Hertzberg at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated: 12/22/04


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